

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1, 3, 5-9, 11-16 and 18-27 are pending in the present application. Claims 1, 3, 5, 8, 11, 12 and 14 have been amended, claims 2, 4, 10 and 17 have been cancelled and claims 24-27 have been added by the present amendment.

In the outstanding office action, the drawings were objected to; claims 1, 3 and 4 were objected to; claims 2, 3, 5, 8 and 11 were rejected under a 35 U.S.C. § 112, second paragraph; claims 1, 3, 4, 8, 9, 11, 14, 16, 18, 19, 21 and 22 were rejected under 35 U.S.C. § 102(b) as anticipated by Masui; claims 2 and 5 were indicated as allowable if rewritten to overcome the rejections under 35 U.S.C. § 112, second paragraph and to be in independent form; and claims 6, 7, 10, 12, 15, 17 and 20 were indicated as allowable if rewritten in independent form.

Applicants thank the examiner for the indication allowable subject matter. In light of this indication, claim 1 has been amended to include the subject matter recited in claim 2, claim 5 has been rewritten in independent form, claim 8 has been amended to include the subject matter recited in claim 10, claim 12 has been amended to depend on claim 8, and claim 14 has been amended to include the subject matter recited in claim 17. The appropriate claims have also been amended to address the objection/rejection noted in the Office Action. Further, regarding the objection to claim 3 that the term “the” in “the plurality of taps” be replaced with “a,” applicants note the second line of claim 3 recites “a

plurality of taps". Thus, it is respectfully submitted claim 13 does not need to be amended as suggested in the outstanding Office Action. Accordingly, it is respectfully submitted the pending claims are allowable and the rejections on the outstanding office action have been overcome.

Further, new claims 24-27 have been added to set forth the invention in a varying scope and applicants submit the newly added claims are supported by originally filed specification. In particular, new claim 24 is similar to claim 1, but recites that the generated pilot signals are aligned such that a first one of the plurality of CDMA transmitters transmits at a first time that is offset from a beginning of a frame, a second one of the plurality of CDMA transmitters transmits at a M/N time, and a N one of the plurality of CDMA transmitters transmits at a $(N-1) M/N$ time, where M is a time length of the frame and N is a total number of the plurality of CDMA transmitters.

These features are shown in Figure 4, for example, in which the generated pilot signals are aligned such that User 1's signal is transmitted as a first time that is offset " L " from a beginning of a frame, User 2's signal is transmitted at a M/N time, and a N signal is transmitted at a $(N-1)M/N$ time, where M is a time length of the frame and N is a total number of the plurality of CDMA transmitters.

Therefore, when a first user 101 transmits pilot signals, the matched filter 200 catches the signal synchronization of the first user 101. If the PN seed used by the user is identical to the first coefficient loaded from the synchronization point of time, it transmits the position thereof to the corresponding demodulator 301, as shown in steps ST14 and ST15.

At this time, the position is a value in which the offset from the synchronization point of time is not considered (see page 10, line 18 to page 11, line3).

In addition, when a second user 102 transmits pilot signals, the matched filter 200 catches the signal synchronization of the second user 102. If the PN seed used by the second user 102 is identical to the coefficient loaded at the time point M/N msec, it outputs the position in which the offset from the synchronization point of time is considered to the corresponding demodulator 302. Here, the offset is the time taken for loading the corresponding coefficient. That is, in the case that synchronization is caught by using the coefficient loaded at the time point of M/N msec, the offset at that time becomes M/N msec. When synchronization is caught by using the coefficient loaded at the time point of $2M/N$ msec, the offset at that time becomes $2M/N$ msec. Thus, in the position where the synchronization is caught using the first coefficient loaded from the synchronization point of time, the offset is not considered. In this manner, the user signal synchronized in the single matched filter 200 is demodulated by the corresponding demodulator (see page 11, lines 4-16).

It is respectfully submitted the applied act does not teach or suggest the aligned pilot signals as claimed. Accordingly, it is respectfully submitted independent claim 24 and the claims depending therefrom are also allowable.

Further, the specification has been amended to include a reference to Figure 4 in the detailed description of preferred embodiments and to include a reference to step ST13 discussed in Figure 5. Lines 11-16 at page 11 have also been amended to coincide with the description in the figures. Accordingly, it is respectfully requested the objection to the drawings be withdrawn.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance are earnestly solicited. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, **David A. Bilodeau**, at the telephone number listed below.

Serial No. 09/678,836
Amdt. dated August 26, 2004
Reply to Office Action dated June 8, 2004

Docket No. P-0123

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
FLESHNER & KIM, LLP



Daniel Y.J. Kim, Esq.
Registration No. 36,186
David A. Bilodeau, Esq.
Registration No. 42,325

P.O. Box 221200
Chantilly, Virginia 20153-1200
703 766-3701 DYK/DAB:knv
Date: AUGUST 26, 2004

Please direct all correspondence to Customer Number 34610

\\fk4\Documents\2000\2000-732\40183.doc